EXHIBIT D

Supplemental Report of E. Deborah Jay, Ph.D. August 2021

James Hayden v. 2K Games, Inc. and Take-Two Interactive Software, Inc.



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Supplemental Report of E. Deborah Jay, Ph.D.

A. Summary of Opinions

In this action I was retained on behalf of defendants, 2K Games, Inc. and Take-Two Interactive Software, Inc., to conduct a survey with a nationwide representative sample of individuals who had bought a relevant NBA 2K video game (2K16, 2K17, 2K18, 2K19, 2K20 or 2K Mobile). The purpose of the NBA 2K Survey that I conducted (hereinafter, the "Jay Survey") was to determine the reasons why consumers bought an NBA 2K video game and whether the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason why consumers bought an NBA 2K video game.

On May 20, 2021, I submitted an expert report about the survey that I conducted in connection with this matter (hereinafter, the "Jay Survey Report"). As detailed in my survey report, the Jay Survey found that consumers bought the relevant NBA 2K video games for numerous reasons, principally that they like basketball. The Jay Survey also found that no consumer bought the relevant NBA 2K video games for the tattoos on LeBron James, Danny Green, or Tristan Thompson – that is, there was no link between the sales of the NBA 2K video games and their depiction of the tattoos on LeBron James, Danny Green, or Tristan Thompson.

Since my original report, I have received a report prepared by Dr. H. Tolga Bilgicer on behalf of Plaintiff, dated July 1, 2021. In that report (the "Bilgicer Report"), Dr. Bilgicer gives a number of opinions with which I disagree, including criticisms of the Jay Survey that are

unwarranted and a newly conducted survey (the "Bilgicer Survey") that is deeply flawed. I submit this supplemental report to address the numerous problems in the Bilgicer Report.¹

In this report, I explain how Dr. Bilgicer's criticisms of the Jay Survey are unfounded. The Jay Survey was performed according to accepted survey standards and in conformity with the guidelines discussed in the *Federal Manual for Complex Litigation*, 4th Ed. §11.493 (2004) and the *Reference Guide on Survey Research*, *Federal Reference Manual on Scientific Evidence*, 3rd Ed. (2011).² The Jay Survey included a combination of clear, unambiguous open-ended and closed-ended questions designed to elicit both the main reasons and other reasons respondents purchased their NBA 2K video games. Unlike the Bilgicer Survey, the Jay Survey also included a proper control, consistent with well-accepted survey principles. Based on my education and experience, I am confident that the Jay Survey provides a reliable and valid measure of the reasons consumers bought an NBA 2K video game and whether the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason consumers bought an NBA 2K video game.

Moreover, in this report, I also comment on the Bilgicer Survey insofar as Dr. Bilgicer claims his survey contradicts the results of the Jay Survey. His report reveals an evident misconception of how consumer surveys are properly conducted and analyzed. *First*, the Bilgicer Survey included questions that were leading, cognitively difficult, and designed to inflate the value respondents assigned to NBA players' attributes, including tattoos. *Second*, the answer choices

Since my original report, I also reviewed excerpts (¶ 58-63) from a report prepared by Dr. Justin Lenzo on behalf of Plaintiff, dated July 1, 2021. In the excerpts from that report (the "Lenzo Report"), Dr. Lenzo gives a number of opinions with which I disagree, including criticisms of the Jay Survey that are unwarranted. I understand that Dr. Lenzo is not a survey expert, and his criticisms reflect a fundamental misunderstanding of how consumer surveys in copyright, trademark and intellectual property cases are designed. Dr. Lenzo did not conduct a survey, and his opinions are not supported by any other consumer survey or representative measurements of consumer purchase decisions.

The survey population was properly defined as individuals age 16 to 55 who had bought a relevant NBA 2K video game, and the sample selected was representative of that population. The questions asked in the Jay Survey were clear and not leading. The data gathered for the Jay Survey were accurately reported, and the data were analyzed in accordance with accepted statistical principles. The Jay Survey was conducted, under my direction, by survey research professionals following proper survey procedures, and the entire process was conducted so as to ensure objectivity.

provided in the Bilgicer Survey were incomplete, ambiguous, and compound. *Third*, Dr. Bilgicer did not use a proper control to sufficiently account for guessing, demand effects, or other sources of "noise" in the Bilgicer Survey. *Fourth*, the Bilgicer Survey does not show whether consumers purchased their NBA 2K video games because of any particular tattoos on any particular NBA players (including on LeBron James, Tristan Thompson, or Danny Green), as Dr. Bilgicer never included any such questions in the Bilgicer Survey. *Fifth*, Dr. Bilgicer mischaracterizes the results of his survey by overstating the importance of the NBA players' tattoos, when in fact survey respondents allocated only a negligible percentage (less than 1%) of the value of the NBA 2K video games to all tattoos on all of the NBA players in the games. As detailed below, I have concluded that the Bilgicer Survey is gravely flawed, and I am certain that it does not provide a reliable or valid measure of the reasons for buying an NBA 2K video game or whether the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason why consumers bought an NBA 2K video game.

B. Credentials and Materials Considered

I am a Principal and Founder of Jay Survey Strategics LLC, a marketing and public opinion research firm in the San Francisco Bay Area that specializes in providing survey design, sampling, data collection and statistical analysis. Before this, I served for 23 years as President and CEO of Field Research Corporation, the highly respected marketing and opinion research firm started by Mervin Field in 1945. During my career I have designed and directed well over 800 surveys and more than 400 surveys in legal cases. I have testified on behalf of plaintiffs and defendants in proceedings before state and federal courts and other tribunals (such as the U.S. Patent and Trademark Office and the U.S. International Trade Commission), and routinely have been qualified by courts as an expert in survey methodology. I also have lectured on litigation surveys and survey methods before bar associations, trade associations, and business and law schools, and

been on the faculties of numerous continuing legal education programs. My qualifications and details about my compensation in this case are described in the Jay Survey Report.

My opinions regarding Dr. Bilgicer's survey are based on my review of his survey report and its appendices, my analyses of the data he provided for his survey, and on my education and experience. I understand that I may be provided with additional information or asked to perform further analyses in connection with the Bilgicer Report and his survey. If so, this report may be amended or revised. In connection with my anticipated trial testimony I may use as exhibits various documents produced in this action that refer to or relate to the matters discussed in this report. In addition, I may create or assist in the creation of certain demonstrative exhibits to assist me in testimony. I have not yet selected or created such exhibits.

C. The Jay Survey

In all, 520 individuals who bought one or more of the relevant NBA 2K video games were interviewed for the Jay Survey. These individuals were told the following:

Our next questions are about the NBA 2K video game(s) you bought. We would like to assure you that we are only interested in your opinions and beliefs. If you do not know the answer to a question or do not have an opinion or belief, please indicate this.

Then, they were asked up to four sets of questions. The first set of questions collected information about the reasons why survey respondents bought an NBA 2K video game and included the following open-ended questions (questions that required survey respondents to answer in their own words):

A1. What were the <u>main reasons</u> why you bought an NBA 2K video game? (PLEASE TYPE YOUR ANSWER IN THE BOX)

IF NOT "DON'T KNOW":

A2. What were the <u>other reasons</u>, if any, why you bought an NBA 2K video game? (**PLEASE TYPE** YOUR ANSWER IN THE BOX)

The second set of questions was "closed-ended" (the questions included a list of response choices from which respondents selected their answers). This set of questions asked survey

respondents about 20 possible reasons for buying an NBA 2K video game, including the depiction of the NBA players' face, body or other aspects of their appearance. Additionally, survey respondents were asked about a fictitious feature, the "XTJ feature," which was created by randomly generating three capitalized letters. The purpose of the fictitious item was to determine the amount of guessing, demand effects, and other sources of "noise" in the Jay Survey. The second set of questions was worded, as follows:

B1. Which of the following items, if any, were <u>a reason</u> why you bought an NBA 2K video game? (SELECT ALL ANSWERS THAT APPLY)

I or a family member likes basketball

The ease of playing the game

The speed of gameplay

The overall quality of the graphics

The soundtrack

The camera angles during gameplay

The number of options

The inclusion of current NBA teams

The inclusion of other teams besides current NBA teams (such as the classic, historic, or national teams)

The crowd animations

The pre-game, half-time, and/or post-game shows

The different arenas

The ability to build your own team or create an expansion team

The ability to customize a player's game style, tendencies or attributes

The ability to maintain a trading card collection

The ability to play tournament-style competitions against other players

The ability to collect or purchase cards that unlock players and other items

The depiction of the NBA players' movements

The depiction of the NBA players' face, body or other aspects of their appearance

The price/value

The XTJ feature

None of the above

Don't know

IF MORE THAN ONE REASON SELECTED:

B2. Which one of these was <u>the most important reason</u> why you bought an NBA 2K video game?

IF MORE THAN TWO REASONS SELECTED:

B3. Which one of these was the next most important reason why you bought an NBA 2K video game?

Survey respondents who said the depiction of the NBA players' face, body or other aspects of their appearance was one of the reasons why they bought an NBA 2K video game in Q.B1 were

asked a third set of questions. The purpose of the third set of questions was to determine whether the depiction of the appearance of LeBron James, Danny Green, or Tristan Thompson was a reason for buying an NBA 2K video game. This set of questions included the following items:

C1. Was the depiction of the appearance of any particular NBA player or players a reason why you bought an NBA 2K video game?

IF YES:

C2. Which NBA player or players' depiction was a reason why you bought an NBA 2K video game? (PLEASE TYPE YOUR ANSWER IN THE BOX)

Survey respondents who did not say "Don't know" when asked which NBA players were a reason for their purchase in Q.C2 were then asked a fourth set of questions. The purpose of the fourth set of questions was to determine whether the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason why survey respondents bought an NBA 2K video game. This set of questions included the following items:

C3. In the NBA 2K video game(s) you bought, were there any particular features or aspects you thought were important to depict of these NBA players' appearance: [ANSWER FROM C2]?

IF YES:

C4. What features or aspects were important to depict of these NBA players' appearance: [ANSWER FROM C2]? (PLEASE TYPE YOUR ANSWER IN THE BOX)

The Open-Ended Questions in the Jay Survey Are Entirely Proper

As an initial matter, Dr. Bilgicer faults the Jay Survey for including open-ended questions because some respondents gave only a few reasons when they were initially asked why they bought an NBA 2K video game (in Qs. A1 or A2). (Bilgicer Report, at ¶ 23-24). Contrary to Dr. Bilgicer's assertions, not only are open-ended questions widely used in consumer surveys like this one, but there are specific benefits to open-ended questions that make them worth asking.

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Dr. Bilgicer does not criticize the wording of Qs. A1 or A2 in the Jay Survey. Instead, he finds fault with Q.A2 because some respondents did not list any or many reasons (in addition to the reasons they indicated in Q.A1) for buying an NBA 2K video game. However, Dr. Bilgicer's analysis of how respondents answered Q.A2 is misleading because it ignores the reasons respondents gave for buying an NBA 2K video game in Q.A1.

For example, unlike closed-ended questions, open-ended questions do not provide a finite list of answer choices for the respondents, and they therefore tend to be less leading than closed-ended questions. Open-ended questions were particularly appropriate here because the relevant NBA 2K video games include many features and attributes, and it was not possible to list all of the reasons for buying an NBA 2K video game in the closed-ended questions. Open-ended questions thus provide an opportunity or space for respondents to offer or add an answer that may not have been included in a closed-ended question. When responding to closed-ended questions, a respondent may simply settle on an option that is close to best, whereas when responding to an open-ended question, the respondent can provide a response in their own words that best fits their reasons for purchasing the NBA 2K video games.

Moreover, the Jay Survey included <u>both</u> open-ended and closed-ended questions. If the open-ended questions were flawed, as Dr. Bilgicer suggests, then the closed-ended questions would show that. On the contrary, however, both the open-ended and the closed-ended questions support the exact same conclusion – namely, that consumers bought the relevant NBA 2K video games for numerous reasons, principally that they like basketball. Thus, it was entirely proper to include open-ended questions in the Jay Survey, and the results of these questions are reliable.

Shari Diamond, *Reference Guide on Survey Research, Reference Manual on Scientific Evidence*, 3rd. 359, 392 (FJC, 2011) ("The advantage of open-ended questions is that they give the respondent fewer hints about expected or preferred answers. Precoded responses on a closed-ended question, in addition to reminding respondents of options that they might not otherwise consider, may direct the respondent away from or toward a particular response."); Herbert Weisberg, et. al., *Questionnaire Construction, An Introduction to Survey Research, Polling, and Data Analysis*, 3rd. 77, 78 (Sage, 1996) ("Open-ended questions have the advantage of allowing respondents to express their thoughts and feelings in their own words instead of in words chosen by the researcher... Thus, one advantage of open-ended questions is that researchers can see how respondents actually think about the topic.").

Janice Ballou, *Open-Ended Question, Encyclopedia of Survey Research Methods*, 547 (Sage, Ed. Lavrakas, 2008) ("When there is a wide range of answers expected to provide individual factual information, an open-ended structure can address the problem of having a list of more response choices than it is practical to include in a questionnaire."); Floyd Fowler, *Improving Survey Questions: Design and Evaluation*, 59 (Sage, 1995) ("The open-ended question has several advantages. It does not limit answers to those the researcher thought of.... If the list of possible answers is not known or is very long, the open form may be the right approach.").

The Questions in the Jay Survey Elicited Respondents' Main Reasons and Their Other Reasons for Buying an NBA 2K Video Game

Dr. Bilgicer further claims that the majority of the questions in the Jay Survey were "designed to identify the main reasons, not all reasons, that consumers bought the accused games." (Bilgicer Report, at ¶ 19 and ¶ 23). That is incorrect. The Jay Survey asked nine questions about the NBA 2K video games, and only three of the questions concerned respondents' "main" or "most important" reasons for buying an NBA 2K video game (Qs. A1, B2 and B3). The other six questions asked survey respondents (a) to describe their "other reasons" for buying an NBA 2K video game (Q.A2), (b) whether different features or attributes of the game were "a reason" for buying an NBA 2K video game, including the depiction of the appearance of the NBA players (Qs. B1, C1 and C2), and (c) whether it was "important" to depict particular features or certain aspects of the NBA players' appearance (Qs. C3 and C4).

In particular, after survey respondents were asked an open-ended question about their "main reasons" for buying an NBA 2K video game (Q.A1), survey respondents were asked a follow-up or probing open-ended question about their "other reasons" for buying an NBA 2K video game (Q.A2). Dr. Bilgicer contends that even these questions on "other reasons" were "likely to capture only a limited number of reasons regarding the respondents' NBA 2K video game purchases" (Bilgicer Report, ¶ 23). But Qs. A1 and A2 were open-ended, and therefore survey respondents were not limited to a finite set of answer choices. When answering these questions, survey respondents could type in any reason that motivated their decision to purchase an NBA 2K video game.

Moreover, in Q.B1, survey respondents were provided with a list of 20 possible reasons (and a fictitious reason) for buying an NBA 2K video game, and they were instructed to "SELECT ALL THAT APPLY." Most of the Jay Survey respondents (82%) selected more than one reason for buying an NBA 2K video game, and almost three-fourths (74%) of them selected more than two reasons for buying an NBA 2K video game in response to Q.B1. This shows that survey

respondents were not just indicating their "main reason" or even their top two reasons for buying an NBA 2K video game.

In addition, all of the survey respondents who said the depiction of the NBA players' appearance was *a reason* for buying an NBA 2K video game in Q.B1, were then asked whether the depiction of the appearance of any particular NBA players (such as LeBron James, Danny Green, and Tristan Thompson) was *a reason* why they bought an NBA 2K video game (Q.C1). They also were asked what specific features or aspects of the NBA players' appearance were *important* to depict (Q.C4). They were <u>not</u> limited to what features or aspects were *most important* to depict.

Thus, contrary to Dr. Bilgicer's contention, the questions in the Jay Survey collected information about *all* of the reasons for buying an NBA 2K video game (not just the most important reasons for buying the game). Not only was the Jay Survey not limited to the "most important reason," but the Jay Survey actively probed whether certain features on particular

Or. Lenzo also criticizes the inclusion of open-ended questions (which he refers to as "unaided questions") in the Jay Survey, and claims that these questions were only useful "to discern the *most* important drivers of demand." (Lenzo Report, at ¶ 59). He is wrong. As discussed, it was entirely proper to include open-ended questions in the Jay Survey. Moreover, the Jay Survey included both open-ended and closed-ended questions, and the questions in the Jay Survey collected information about all of the reasons (not just the most important reasons) for purchasing an NBA 2K video game. Dr. Lenzo cites verbatim responses for three respondents (less than 1% of the 520 persons interviewed) to the first question (Q.A1) in the Jay Survey and contends they are "neither confirmatory nor contradictory to tattoo realism being an important contributor to overall sales of the games." Dr. Lenzo's analysis fails, however, because it ignores the finding that *none* of the survey respondents mentioned LeBron James, Danny Green, Tristan Thompson or tattoos when they were asked their main reasons and their other reasons for buying an NBA 2K video game at the beginning of the Jay Survey (in Qs. A1 and A2). It also ignores the results for the other questions (Qs. C1-C4) in the Jay Survey that specifically asked about the depiction of the appearance of the NBA players and what features or aspects of their appearance were important to depict; *none* of the Jay Survey respondents said it was important to depict the tattoos on LeBron James, Danny Green, or Tristan Thompson in response to these questions either.

players were among the reasons respondents purchased an NBA 2K video game, something that, as I describe below, the Bilgicer Survey fails to investigate.⁷

The Jay Survey Questions Were Not Difficult for Respondents to Answer

Dr. Bilgicer contends that Q.B1 in the Jay Survey "created a high cognitive burden for respondents" because it included 20 possible reasons (and a fictitious reason) for buying an NBA 2K video game. (Bilgicer Report, at ¶ 29). In support of this contention, Dr. Bilgicer cites a few articles on *conjoint surveys*. (Bilgicer Report, at ¶ 30). A conjoint survey is a survey that breaks a product or service down into its constitutive components and then tests different combinations of these components to identify consumer preferences. An example of a conjoint survey question is shown below: 10

Dr. Lenzo also claims that because only one respondent mentioned "music" in response to the initial questions in the Jay Survey (Qs. A1 and A2) this demonstrates "the limited inferential power" of the Jay Survey because music is nonetheless "likely associated with greater sales" of the game. (Lenzo Report, at ¶ 63.) This is highly misleading, as Dr. Lenzo ignores the results for the other questions in the Jay Survey. In response to Q.B1, 21% of the survey respondents said "the soundtrack" was a reason for buying an NBA 2K video game. Even if respondents did not indicate music was a reason (and they did), Dr. Lenzo's conclusions are misleading because they assume at the outset that music or a particular soundtrack necessarily drove purchases of the NBA 2K video game. But Dr. Lenzo provides no empirical or survey evidence to back up that assumption.

Q.B1 in the Jay Survey also included two other answer choices ("none of the above" and "don't know"). Dr. Bilgicer does not criticize the wording of Q.B1 ("Which of the following items, if any, were a reason why you bought an NBA 2K video game?"), and he asked the identical question in his survey at Q.1. However, unlike Q.B1 in the Jay Survey, Q.1 in the Bilgicer Survey provides only 11 answer choices – many of which were compound and poorlyworded.

Dr. Bilgicer also cites a paper on maximum difference scaling ("MaxDiff"), also known as best-worst scaling, in support of his contention that Q.B1 should have included fewer answer choices. (Bilgicer Report, at FN. 40.) MaxDiff is a survey method used for product design and pricing research that is similar to conjoint. Unlike a MaxDiff survey, the Jay Survey did not show respondents different combinations of attributes for eight or more features up to 24 times and ask them to identify the most and least preferred feature for each combination of items (as is typical in a MaxDiff survey). The Jay Survey is simply not a MaxDiff survey, and Dr. Bilgicer's criticism of the Jay Survey on this point reveals a fundamental misunderstanding of MaxDiff surveys and how they are designed. See Bryan K. Orme, Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research, 3rd., pp. 111-122 (Research Publishers, 2005) ("With MaxDiff, we begin with a list of items or attributes (typically eight or more)... For each set of items, respondents pick the most and least important (or most and least preferred)... Respondents typically complete about eight to twenty-four such questions. Across the questions, each item is seen many times by each respondent.").

See Jonathan Tomlin and Robert Zeithammer, "Product Labeling Class Actions – Identifying the 'Con' in Conjoint Surveys," Bloomberg Law (November 1, 2018) and Bryan K. Orme, Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research, 3rd., pp. 7-17 (Research Publishers, 2005).

- Q. How much do you like each of these smartphones? (USE A SCALE FROM 0 TO 10, WHERE 0 = NOT AT ALL AND 10 = VERY MUCH)
 - (a) Brand: iPhone; Screen Size: 6"; Color: Purple; Price: \$1,300.
 - (b) **Brand**: Samsung; **Screen Size**: 5"; **Color**: Blue; **Price**: \$1,200.
 - (c) Brand: Sony; Screen Size: 7"; Color: White; Price: \$1,000.

As an initial matter, the Jay Survey is simply not a conjoint survey and Dr. Bilgicer's criticism of the Jay Survey on this point thus reveals his fundamental misunderstanding of conjoint surveys and how they are designed. Moreover, the Jay Survey has questions and response options that are properly designed and consistent with accepted survey methodology. Because NBA 2K video games include dozens of features and attributes, it would have been inappropriate to include only five or six answer choices for Q.B1 as advocated by Dr. Bilgicer. [Bilgicer Report, at ¶ 30]. Unlike a conjoint survey, the Jay Survey did not ask respondents to evaluate video games with different collections of attributes. Q.B1 merely asked survey respondents to *select all* of the items that were *a reason* why they bought an NBA 2K video game. If Q.B1 were difficult to answer, a significant percentage of survey respondents would have selected the *Don't know* response option. Yet, a negligible percentage (2%) of the survey respondents selected the *Don't know* response option when asked their reasons for buying an NBA 2K video game (in Q.B1), indicating that most respondents did not have difficulty with the question being asked.

Qs. B2 and B3 (which asked respondents to indicate their most important reason and their next most important reason for buying an NBA 2K video game) were not difficult for respondents to answer either. These questions listed only the reasons survey respondents selected in Q.B1. Again, a negligible percentage (2%) of survey respondents selected the *Don't know* response option when asked their most important reason for buying an NBA 2K video game (Q.B2), and less than 1% of the survey respondents selected the *Don't know* response option when asked their

Dr. Bilgicer did not follow his own advice in the survey he conducted. Even though he intimates that I should have only provided five or six answer choices for Q.B1, he provided 11 answer choices for an identical question in his survey (Q.1).

next most important reason for buying an NBA 2K video game (Q.B3). Once again, this indicates that the Jay Survey questions were not difficult for respondents to answer.

The Jay Survey Questionnaire Is Well-Designed

In addition, Dr. Bilgicer generally alleges that the Jay Survey was not well-designed. (Bilgicer Report, at ¶ 17 and 27). He is wrong. The Jay Survey asked straightforward, non-leading questions that often are included in marketing surveys and have been credited in other copyright disputes. As previously noted, the questionnaire included both open-ended questions (questions that asked respondents to describe their reasons for buying an NBA 2K video game in their own words) and closed-ended questions (questions that asked respondents to select from a list of possible reasons for buying an NBA 2K video game, including the depiction of the appearance of the NBA players).

Before survey respondents were asked their reasons for buying an NBA 2K video game, the survey informed them that we were only interested in their opinions and beliefs and instructed survey respondents to indicate whether they did not know the answer to a question or have an opinion or belief. All of the questions about the NBA 2K games in the Jay Survey included a *Don't know* response option, and the order of the answer choices for closed-ended questions was randomized across survey respondents to minimize the potential for the order of the answer choices to influence the survey responses (known as *order effects* or *order bias*). The Jay Survey also included a fictitious feature – the XTJ feature – or *control question* to measure the amount of guessing, demand effects, or other sources of "noise" in the survey.

The Jay Survey in this matter asked the same questions and was conducted in the identical manner as the survey I conducted in another copyright dispute. *See Solid Oak Sketches, LLC. v. 2K Games, Inc.* 449 F. Supp. 3d 333, 351 (S.D.N.Y. 2020).

The Jay Survey Questions Are Clear, Precise, and Unbiased

Dr. Bilgicer claims that the questionnaire for the Jay Survey used "ambiguous and unclear language." (Bilgicer Report, at ¶ 31-33.). First, he contends that I should not have asked whether "the depiction of the NBA players' face, body or other aspects of their appearance" was a reason for buying an NBA 2K video game in Q.B1. Instead, Dr. Bilgicer suggests that I should have asked whether the "realism of the NBA players' appearance" was a reason for buying an NBA 2K video game. (Bilgicer Report, at ¶ 31.) I disagree. He provides no reason as to why a respondent who purchased an NBA 2K video game for the tattoos on an NBA player would not have said *the depiction of the NBA players' face, body or other aspects of their appearance* was a reason for buying an NBA 2K video game. Further, because many features or attributes (besides the depiction of the NBA players' appearance) contribute to the realism of the NBA 2K video games (such as, the overall quality of the graphics, the speed of gameplay, the NBA players' movements and skills, the soundtrack, the crowd and stadium, the referees and coaches, and the camera angles during gameplay), it would be misleading to suggest that the realism of the game derives only or primarily from the appearance of the NBA players.

Next, Dr. Bilgicer intimates that the Jay Survey should have asked a closed-ended question about "realistic tattoos." I disagree. I did not ask a closed-ended question about "realistic tattoos" because this would have been leading and suggestive and communicated to survey respondents that the tattoos on the NBA players were *realistic* and *important*. ¹³ Instead, I asked unbiased, open-

See G. Kip Edwards, The Daubert Revolution and Lanham Act Surveys, Trademark and Deceptive Advertising Surveys: Law Science and Design, 329, 355 (ABA, Eds. Diamond & Swann 2012) ("[E]ven a perfectly designed and executed survey will generate noise, guessing, lack of understanding, so-called 'yea-saying,' and other responses that are extraneous to what the survey is attempting to test. This problem can be exacerbated in surveys that use closed-ended questions..."); Shari Diamond, Control Foundations: Rationales and Approaches, Trademark and Deceptive Advertising Surveys: Law Science and Design, 201, 204 (ABA, Eds. Diamond & Swann 2012) ("Acquiescence bias occurs because subsets of individuals, often called yea-sayers, have a 'tendency to endorse any assertion made in a question, regardless of the content."); Mike Rappeport, Design Issues for Controls, Trademark and Deceptive Advertising Surveys: Law Science and Design, 217, 220 (ABA, Eds. Diamond & Swann 2012) ("In even the best designed survey, the very fact that a question is being posed may 'lead' some respondents to in effect say to themselves, 'Why would the researcher bother asking questions that have no answers?"").

ended questions that provided the survey respondents with multiple opportunities to indicate that tattoos were a reason why they bought an NBA 2K video game. ¹⁴ Specifically, I asked the survey respondents their main reasons and their other reasons for buying an NBA 2K video game (Qs. A1 and A2). I also asked the survey respondents (a) whether the depiction of the appearance of any particular NBA players was a reason for buying an NBA 2K video game, and, if so, which NBA players' depiction was a reason for buying an NBA 2K video game, and (b) whether it was important to depict any particular features or aspects of these NBA players' appearance, and, if so, what features or aspects of these NBA players' appearance were important to depict (Qs. C1-C4). Yet only one person (less than 1% of the 520 Jay Survey respondents) mentioned tattoos at all, and none of the survey respondents said the tattoos on LeBron James, Danny Green, or Tristan Thompson were one of the reasons why they bought an NBA 2K video game.

Dr. Bilgicer also contends that Q.C1 ("Was the depiction of the appearance of any particular NBA player or players a reason why you bought an NBA 2K video game?") was vague, and that I should have asked whether the survey respondents cared about the *realistic appearance* (rather than the *depiction of the appearance*) of particular NBA players in the NBA 2K video games. ¹⁵ (Bilgicer Report, at ¶ 34). I disagree. Again, Dr. Bilgicer provides no rationale as to why survey respondents who cared about the tattoos on LeBron James, Danny Green, or Tristan

Dr. Lenzo also intimates that instead of asking open-ended questions about the appearance of the NBA players (and what features or aspects of their appearance were important to depict), it would have been preferable to ask a closed-ended question about "realistic tattoos." (Lenzo Report, at ¶ 58-59). He is wrong. As discussed, I did not ask a closed-ended question about "realistic tattoos" because this would have been leading and suggestive and communicated to survey respondents that the tattoos on the NBA players were *realistic* and *important*.

Specifically, Dr. Bilgicer claims that Q.C1 in the Jay Survey should have been worded in the following manner: "Was the realistic appearance of any particular NBA player(s) a reason why you bought an NBA 2K video game?"

Thompson would not have answered Q.C1 affirmatively. ¹⁶ Further, if Q.C1 were ambiguous or unclear, a significant percentage of the survey respondents would have selected the *Don't know* response option for this question. Yet, as with the other questions I asked, a negligible percentage (1%) of the survey respondents said *Don't know* in response to Q.C1. Inexplicably, Dr. Bilgicer did not even ask his suggested question or any other question in his survey about whether his respondents cared about the realistic appearance *of particular NBA players*. Thus, Dr. Bilgicer does not provide any empirical evidence that, had Q.C1 been worded differently, the results of the Jay Survey would have changed.

The Sample for the Jay Survey Is Properly Defined

To account for guessing, demand effects, and other sources of "noise" in a survey, copyright, trademark, and other intellectual property surveys typically include either a *control group* or a *control question*. ¹⁷ The Jay Survey uses a *control question*. A *control question* (a question about a fictitious feature or attribute) provides an indication of the extent to which survey

Dr. Lenzo contends that I should not have asked Qs. C1 and C2 (that is, whether the appearance of "any particular NBA player or players" was a reason for buying an NBA 2K video game, and, if so, what NBA players' depiction was a reason for buying an NBA 2K video game). Instead, he contends that I should have asked all of the respondents Qs. C3 and C4 (the questions that asked what features or aspects of the NBA players' appearance were important to depict) even if they did not care about the depiction of the appearance of particular NBA players. (Lenzo Report, at ¶ 61-62.) I disagree. Dr. Lenzo does not understand the purpose of Qs. C1-C4 in the Jay Survey. The purpose of these questions was to determine whether consumers valued the tattoos on particular NBA players (specifically, LeBron James, Danny Green and Tristan Thompson). If respondents did not care about the tattoos on particular players, then logically they would have bought the games even if they had not included the tattoos inked by Mr. Hayden. Unlike Dr. Lenzo, Dr. Bilgicer did not criticize the inclusion of Qs. C1 and C2 in the Jay Survey, and even his suggested rewording of Q.C1 refers to the appearance of any "particular NBA player(s)."

See Shari Diamond, Control Foundations: Rationales and Approaches, Trademark and Deceptive Advertising Surveys: Law Science and Design, 201, 216 (ABA, Eds. Diamond & Swann 2012) ("Controls play a central role in enabling a survey to rule out threats to valid causal inference.") and Shari Diamond, Reference Guide on Survey Research, Reference Manual on Scientific Evidence, 3rd., 359, 401 (FJC, 2011) ("Every measure of opinion or belief in a survey reflects some degree of error. Control groups and... control questions are the most reliable means for assessing response levels against the baseline level of error associated with a particular question."); J. Thomas McCarthy, 6 McCarthy on Trademarks §32:187 (2021) ("Courts have held that a survey that fails to use a control may be given less weight or even excluded from evidence altogether."); Procter & Gamble Pharm., Inc. v. Hoffmann-LaRoche Inc., 2006 WL 2588002, at *23 (S.D.N.Y. Sept. 6, 2006) ("[C]losed-ended questions, however helpful, can be leading and suggestive... [F]orms of bias involving closed-ended questions include 'yea-saying,' which is the tendency to give the answer the participant believes the interviewer is seeking... This effect can be mitigated through the use of a control question.").

respondents select features or attributes merely because the survey asked about those features or attributes. The use of a control question serves much the same purpose in surveying as the use of a placebo (or sugar pill) does in a clinical trial concerning a new drug. In a clinical trial, the percentage of patients who get well after taking a sugar pill is subtracted from the percentage who get well after taking the new drug. In other words, the sugar pill (or "control") provides a measure of the extent to which patients who took the new drug would have recovered on their own. If a clinical trial does not include a control or the results of the control (or sugar pill) are ignored, the efficacy of the new drug will be inflated.

Like a placebo in a clinical trial, in a survey, the *control question* provides an estimate of the percentage of respondents who selected an answer choice (other than the fictitious feature) due to guessing, yea-saying, demand effects, or "noise." It is widely established that, when administering a survey that uses a *control question*, the percentage of survey respondents who selected the control or fictitious feature should be subtracted from the percentage who selected the other features or attributes in the survey. When survey respondents who select the fictitious

Mike Rappeport, Design Issues for Controls, Trademark and Deceptive Advertising Surveys: Law Science and Design, 217, 221 (ABA, Eds. Diamond & Swann 2012) ("To get a credible prediction of real-word behavior, we need to be able to separate out the survey artifacts from real-word behavior. Thus, for a survey to be useful it is necessary to get a reliable estimate of the contribution of the 'survey artifacts' to the results. This estimate can then be subtracted from the survey results.") (Italics added.); J. Thomas McCarthy, 6 McCarthy on Trademarks §32:187 (2021) ("[T]here is sometimes 'general background noise' in survey figures and a control is necessary to identify this... These must be filtered out through control questions... The net rate of confusion is the raw confusion rate minus the rate produced by the control question."); Vital Pharmaceuticals, Inc. v. Monster Energy Company, 2021 WL 3371942, at *22 (S.D. Fla. Aug. 3, 2021) ("[E]xperts typically subtract the control group's confusion rate, referred to as 'noise,' from the confusion rate in the test group... Mr. Berger... claimed that the third-party cans he used in his survey could serve as valid, 'internal' controls...But, even accepting Mr. Berger's 'explanation,' his consumer survey would remain useless because he never even tried to determine how much of his confusion rate came from these 'internal controls.'"); Combe Inc. v. Dr. August Wolff GmBH & Co. KG Arzneimittel, 382 F.Supp.3d 429, 439 (E.D. Va. 2019) ("In total, VAGISIL was recognized by more respondents than any other brand name shown in the survey, with 90% of all respondents recognizing VAGISIL. Only 5.3% of respondents stated they had seen or heard of the control, VAGIZOX...Accordingly, the Fame survey reported a net awareness of 85% for VAGISIL; that is, it reflected that 85% of respondents recognized VAGISIL specifically because of the mark's fame and not because of other factors."); Novartis Consumer Health, Inc. v. Johnson & Johnson-Merck Consumer Pharmaceuticals Co., 290 F.3d 578, 591 (3rd. Cir. 2002) ("In the MNTS cell, approximately 30% of the respondents expressed their belief that MNTS provided relief that lasted the whole night. By contrast, less than 5% of the respondents in the control cell believed that Mylanta Extra Strength provides relief that lasts all night. After netting out this 'noise,' the survey results indicated that a total of 25% of respondents received a message that the MNTS product provides all-night relief.").

feature are excluded from the survey results before they can complete the entire survey, there is no way to determine the percentage who selected the other features or attributes in the survey due to guessing, demand effects, or other sources of "noise." Excluding these respondents at the outset of the survey would be the equivalent to excluding the placebo-taking patients at the beginning of a clinical trial. It undermines the entire purpose of a control.

The Jay Survey included a proper *control question*. In all, 520 randomly-selected individuals qualified for the Jay Survey after being asked a series of screening questions. To be eligible for the Jay Survey an individual had to have purchased at least one of the relevant NBA 2K video games. Those 520 qualified respondents were then asked a series of questions, including questions featuring a fictitious or control feature, the "XTJ" feature. At the end of the survey, I subtracted the percentage who selected the control feature from the percentage who selected other features or attributes in the survey, consistent with widely accepted survey procedures.

Dr. Bilgicer erroneously claims that I should have simply excluded 45 (of the 520) respondents who were interviewed for the Jay Survey from the survey sample because these respondents selected the fictitious feature (the XTJ feature) in response to one or more questions. (Bilgicer Report, at ¶ 17 and ¶ 35-37). This criticism is inconsistent with proper administration of a control, as described above, and is flawed for several reasons.

First, respondents who selected the fictitious feature in Q.B1 were relevant consumers, and if they had been excluded, the sample for the Jay Survey would be underinclusive (that is, it would not be representative of all consumers). Second, the amount of guessing was not the same for all questions in the Jay Survey. For example, 45 respondents or 9% selected the fictitious XTJ feature in Q.B1 (that is, when they were provided with a list of possible reasons for buying an NBA 2K video game and asked to "SELECT ALL THAT APPLY"). However, only one respondent selected the fictitious XTJ feature when asked their "most important reason" (in Q.B2), and only five

respondents selected the fictitious XTJ feature when asked their "next most important reason" for buying an NBA 2K video game (in Q.B3). These results show that most of the 45 respondents who selected the fictitious XTJ feature in Q.B1 did not guess or exhibit demand effects when answering other closed-ended questions in the Jay Survey. Excluding the 45 people who selected the XTJ feature from the survey sample assumes that those specific 45 people are "guessers" who would simply guess on every question, which is demonstrably not a fair assumption. *Third*, there is no reason to assume that any of the 45 respondents who selected the fictitious XTJ feature in Q.B1 were guessing when they answered the open-ended questions or to ignore their responses to these questions either.

Dr. Bilgicer's criticism of the Jay Survey also implies that had the 45 survey respondents who selected the XTJ feature been excluded from my analyses, the results of the Jay Survey would have supported different conclusions. That is not true. Table A compares the responses for the questions concerning the appearance of the NBA players for all 520 survey respondents and after excluding the 45 survey respondents who selected the XTJ feature.

Table A Comparison of Results for the Overall Sample and After Excluding Survey Respondents Who Selected the XTJ Feature from the Jay Survey			
	All Survey Respondents	After Excluding Survey Respondents Who Selected the XTJ Feature	
	(n = 520)	(n = 475)	
Said the depiction of the players' appearance was:			
A reason for buying an NBA 2K video game	27%	25%	
One of the top two reasons for buying an NBA 2K video game	7%	7%	
The most important reason for buying an NBA 2K video game	2%	2%	
Mentioned LeBron James	5%	4%	
Mentioned Danny Green or Tristan Thompson	0%	0%	
Mentioned tattoos	<1%	<1%	
Said the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason for buying an NBA 2K video game	0	0	

As shown in Table A, even had the 45 survey respondents who selected the XTJ feature been excluded, the results of the Jay Survey would support the same conclusion, namely that there is no link between the sales of the relevant NBA 2K video games and the tattoos on LeBron James, Danny Green, or Tristan Thompson.

The Results of the Jay Survey Were Properly Analyzed and Reported

Dr. Bilgicer did not re-code the responses to the open-ended questions or present an alternate analysis of any of the Jay Survey results. Instead, he points to the answers for nine survey respondents who mentioned "realism" in response to the initial open-ended questions in the Jay Survey (Qs. A1 and A2), and claims that I ignored these responses. (Bilgicer Report, at ¶ 44.). Dr. Bilgicer's claim that I "ignored" these responses is false. The percentage of survey respondents who referred to the realism of the games or players was included in the table below in my survey

report (at page 12). ¹⁹ Additionally, the verbatim responses for the open-ended questions for all of the Jay Survey respondents (including the handful of survey respondents who mentioned realism) are included in Appendices G and H of my survey report.

Table B* Main Reasons and Other Reasons Survey Respondents Volunteered for Buying an NBA 2K Video Game in the Jay Survey		
	Percent of Survey Respondents	
	(n = 520)	
I or my family likes basketball, sports or sports video games	32%	
The game is fun or entertaining (like the gameplay)	31	
Bought it for a family member, as a gift, or to play with a family member	20	
Am a fan of NBA 2K video games (liked other NBA 2K video games, the modes or options, it's the best or latest game)	17	
It's popular, friends recommended it, or wanted to play with friends /others	15	
The graphics or animation	9	
The price or value (was bundled with other games or products)	7	
Like the roster, the teams or a specific team, has the newest or my favorite NBA players	6	
The realism of the game or players	2	
Mentioned LeBron James, Danny Green, or Tristan Thompson	0	
Mentioned tattoos	0	
Misc. other comments only/None of the above	1	
Don't know	12	

^{*} Based on Questions A1 and A2. Note, percentages add to more than 100% because some survey respondents volunteered more than one reason for buying an NBA 2K video game.

As shown by Table B above, Dr. Bilgicer also exaggerates the significance of the nine verbatims that he cites in his report. Contrary to his intimation, a negligible percentage (2%) of the 520 respondents interviewed for the Jay Survey said that the realism of the game or players was a main reason or another reason for buying an NBA 2K video game.

Dr. Bilgicer further asserts that I did not ask follow-up questions or "probe" to determine whether the survey respondents who mentioned "realism of the game or players" in Qs. A1 or A2

Table 3 in my survey report summarized the results of Qs. A1 and A2 (which is Table B in this report).

valued tattoos (Bilgicer Report, at ¶ 45.). Again, Dr. Bilgicer is mistaken. All of the survey respondents, including the handful of respondents who mentioned realism in response to Qs. A1 and A2 were asked Q.B1, which enquired whether the depiction of the appearance of the NBA players was a reason for buying an NBA 2K video game. Additionally, all of the survey respondents who said the appearance of the NBA players was *a reason* for buying an NBA 2K video game in Q.B1 were asked additional questions about the appearance of the NBA players (in Qs. C1-C4). Despite being asked multiple questions about the appearance of the NBA players, none of the Jay Survey respondents (including the survey respondents who mentioned the realism of the game or players in Qs. A1 or A2) said the tattoos on LeBron James, Danny Green or Tristan Thompson were a reason for buying an NBA 2K video game.

The Results of the Jay Survey Are Reliable and Valid

Dr. Bilgicer claims that the results of the Jay Survey are not reliable or valid. He is wrong. As discussed, the Jay Survey asked straightforward and unambiguous questions. The sample for the Jay Survey was representative of consumers of the relevant NBA 2K video games, and the results based on the overall sample of Jay Survey respondents have a small margin of error (an indicator of reliability).²⁰

Moreover, Dr. Bilgicer's claim that the Jay Survey does not have "external validity" is simply false. The findings from the Jay Survey are consistent with the findings from a survey that I conducted in 2018 in connection with a different matter that asked the same questions and was conducted with a nationwide representative sample of 507 individuals who had bought one or more

According to Shari Diamond [Reference Guide on Survey Research, Reference Manual on Scientific Evidence, 3rd. 359, 382-383 (FJC, 2011)], probability sample confidence intervals provide a rough indicator of the value of estimates based on Internet surveys, such as this one. The maximum sampling error for analyses based on a probability sample of 520 survey respondents is +/- 4 percentage points at the 95% confidence level. Note, the maximum sampling error is based on percentages in the middle of the sampling distribution (percentages around 50%). Percentages at either end of the sampling distribution (for example, percentages less than 10% or greater than 90%) will have a smaller margin of error.

NBA 2K video games between 2013 and 2018 (which is a form of validation). None of the 1,027 individuals interviewed for the 2018 survey or the NBA 2K survey that I conducted in connection with this matter said the tattoos on LeBron James, Danny Green, or Tristan Thompson were one of the reasons why they bought an NBA 2K video game. Also, as discussed below, a proper analysis of the Bilgicer Survey (despite its many flaws) *validates* the findings of the Jay Survey, namely that consumers bought the relevant NBA 2K video games for numerous reasons and consumers did not value the tattoos on the NBA players.

D. The Bilgicer Survey

Dr. Bilgicer describes the results for 401 of the individuals who qualified for his survey.²⁴ These individuals were asked the following four questions about the reasons for buying an NBA 2K video game:²⁵

This survey was credited by the U.S. District Court in *Solid Oak Sketches, LLC. v. 2K Games, Inc.*, 449 F. Supp. 3d 333, 351 (S.D.N.Y. 2020) ("[T]he Court's reliance on Dr. Jay's findings in deciding Defendants' motion for summary judgment demonstrates that her report is material to the issues involved in the case.").

Dr. Lenzo claims the Jay Survey results "lack inferential power." (Lenzo Report, at ¶ 58 and ¶ 63.) He is wrong. The questions asked in the Jay Survey were clear, precise and unbiased, and the maximum sampling error for analyses based on the overall sample of 1,027 respondents interviewed for the two NBA 2K surveys is very small (+/- 3 percentage points at the 95% confidence level). As noted, the maximum sampling error is based on percentages in the middle of the sampling distribution (percentages around 50%). Percentages at either end of the sampling distribution (for example, percentages less than 10% or greater than 90%) will have a smaller margin of error.

Dr. Lenzo's contention that the Jay Survey results "lack inferential power" also ignores the Bilgicer Survey, which validates the findings of the Jay Survey.

Dr. Bilgicer does not indicate in his report when his survey was conducted. To qualify for the Bilgicer Survey, respondents had to have purchased one of the relevant NBA 2K video games in the past seven years. Even though they purchased one of the relevant NBA 2K video games, Dr. Bilgicer excluded 48 respondents who selected the fictitious XTJ feature in Q.1. (Bilgicer, Survey Terminates Breakdown.) Note, the XTJ response option was not included in Q.2 or in any other question in the Bilgicer Survey.

The other questions in the Bilgicer Survey did not concern the reasons for purchasing NBA 2K video games. Qs. 5 and 6 asked survey respondents how often they use four NBA 2K video game features (instant replay, game stats, gameplan, and camera), and four menu options (zoom in/out, change camera angles, play/pause, and change camera focus). Qs. 7 and 8 asked survey respondents how often they "play with" ten NBA players in the NBA 2K video games (including LeBron James, Danny Green, and Tristan Thompson) and how often they "play with" ten teams in the NBA 2K20 and NBA 2K21 games (including the Los Angeles Lakers, the Philadelphia 76ers, and the Boston Celtics). The last two questions (Qs. 9 and 10) asked survey respondents when they typically purchase NBA 2K video games, and whether they purchase the games for themselves or others.

- Q.1 Which of the following items, if any, were <u>a reason</u> why you bought an NBA 2K game? (**SELECT ALL ANSWERS THAT APPLY**)
 - A. Gameplay features, such as ease of playing the game, speed of gameplay, etc.
 - B. Competitiveness, such as the ability to play tournament-style competitions against other players, or to play with/against classic, historic or national teams.
 - C. Realism of the NBA players
 - D. Accuracy of the game setting, such as the inclusion of current NBA teams, the crowd animations, different arenas, the pre-game, half-time, and/or post-game shows, etc.
 - E. The overall quality of the graphics
 - F. Customization options, such as ability to build your own team, ability to customize a player's game styles or tendencies, etc.
 - G. The XTJ feature [PROGRAMMER NOTE: TERMINATE]
 - H. I and/or my family members like basketball
 - I. Price/Value of the game
 - J. Other features, such as the ability to maintain a trading card collection, the ability to collect or purchase cards that unlock players and other items, the soundtrack, etc.
 - K. Don't know

IF DID NOT SELECT "THE XTJ FEATURE" OR "DON'T KNOW" IN Q1

Q.2 Please allocate 100 points across the reasons for your NBA 2K game purchase. Please give higher points to more important reasons and less points to less important reasons. Please ensure that your points add up to 100 points.

PROGRAMMER NOTES:

(FORCE THE SUM OF POINTS TO BE **100**)
(SHOW ONLY THE REASONS SELECTED IN **Q1**)

IF SELECTED "REALISM OF THE NBA PLAYERS" IN Q1

- Q.3 You selected "realism of the NBA players" as one of the reasons for your NBA 2K game purchase. Which of the following items (that are relevant to how realistic the NBA players are), if any, were a reason why you bought an NBA 2K game? (SELECT ALL ANSWERS THAT APPLY)
 - A. How realistic the NBA players' physiques are
 - B. How realistic the NBA players' faces are
 - C. How realistic the haircuts of the NBA players are
 - D. How realistic the tattoos on the NBA players are
 - E. How realistic the NBA players' game styles or tendencies are
 - F. Other
 - G. Don't know

IF DID NOT SELECT "DON'T KNOW" IN Q3

Q.4 Please allocate 100 points across the reasons you selected in the previous question. Please give higher points to more important reasons and less points to less important reasons. Please ensure that your points add up to 100 points.

PROGRAMMER NOTES:

(FORCE THE SUM OF POINTS TO BE **100**)
(SHOW ONLY THE REASONS SELECTED IN **Q3**)

The Bilgicer Questionnaire Is Poorly Designed

Only Included Closed-Ended Questions: The questionnaire for the Bilgicer Survey did not include any open-ended questions, even though they tend to be less leading than closed-ended questions. One indicator of the reliability or trustworthiness of a survey is the extent to which different types of questions on the same topic elicit the same answers (known as "internal consistency"). Because Dr. Bilgicer did not ask any open-ended questions (and he did not control for guessing in his survey), he does not provide any measure of the extent to which the answers to his closed-ended questions are trustworthy.

Leading Questions and Incomplete Answer Choices: In addition to only including closed-ended questions in the Bilgicer Survey, Dr. Bilgicer also included leading questions. For example, Q.3 in the Bilgicer Survey was worded in the following manner: "Which of the following items (that are relevant to how realistic the NBA players are), if any, were a reason why you bought an NBA 2K game?" Q.3 was leading because it informed survey respondents that each of the answer choices for this question (including tattoos) was "relevant to how realistic the NBA players are" and, therefore, should be valued.

In addition, Option D ("How realistic the tattoos on the NBA players are") suggests to survey respondents that the tattoos in the NBA 2K video games are realistic. As previously discussed, merely asking about a feature or attribute in a survey may lead some respondents to value that feature or attribute. It is unclear how many survey respondents would have thought that the tattoos in the NBA 2K video games were part of the realism of the NBA players *before* Dr. Bilgicer told them so in Option D. But the two surveys that I conducted regarding NBA 2K video games, neither of which included this kind of leading question, strongly indicate that very

Thomas R. Knapp, *Reliability, Encyclopedia of Survey Research Methods*, 713 (Sage, Ed. Lavrakas, 2008) ("A measuring instrument is said to be reliable if it yields consistent results..."); Gregory G. Holyk, *Questionnaire Design*, 656, 657 (Sage, Ed. Lavrakas, 2008) ("Questionnaires should contain items that are both reliable and valid... Reliability is the consistency of the measurement...").

few respondents would have thought of tattoos had Dr. Bilgicer not mentioned them explicitly in his survey. Only one of the 1,027 persons interviewed for the two surveys I conducted even mentioned tattoos, and none of the survey respondents mentioned the tattoos on LeBron James, Danny Green, or Tristan Thompson.

Moreover, even though Q.3 and Q.4 (which is based on Q.3) purport to include all of the attributes that contribute to the realism of the NBA players, the list of answer choices for these questions is incomplete. For example, the list does not include any of the following attributes of the NBA players that may also contribute to how realistic they are: (a) the NBA players' strength, agility, acceleration, or speed, (b) the NBA players' skills, such as their shooting, playmaking, and defense or rebounding skills, or (c) the depiction and number on the NBA player's jersey. ²⁷ The narrow, incomplete answer choices indicates to consumers that these specific choices are the only or primary choices relevant to realism of the NBA players, and should be valued. The answer choices for Q.3 and Q.4 (by default) also suggested to survey respondents that the realism of the NBA players was based more on the NBA players' appearance than on their other attributes. This is because the answer choices for Q.3 were incomplete and four of the answer choices (Options A-D) referred to aspects of the NBA players' appearance (their face, physique, haircuts and tattoos), whereas only one (Option E) related to something besides the NBA players' appearance (their game styles or tendencies).

Thus, the answer choices for Qs. 3 and 4 in the Bilgicer Survey inflated the value of tattoos by informing survey respondents that the tattoos in the NBA 2K video games were realistic and not asking about many other attributes of the NBA players (such as, their strength, agility, acceleration, or speed, or their shooting, playmaking, and defense or rebounding skills).

Also, Option A ("How realistic the NBA players' physiques are") would have been clearer had it enquired about the depiction of the NBA players' height, weight, wingspan and other aspects of their build.

Ambiguous and Compound Answer Choices: For questions in a survey to be reliable, respondents need to be able to understand them—that is, the questions should not be vague, be unnecessarily complex, or be compound ("double-barreled"). 28 Yet, many of the answer choices for Q.1 in the Bilgicer Survey (and Q.2 which is based on Q.1) are compound. For example, Option A (Gameplay Features) includes both the ease of playing the game and the speed of gameplay even though consumers value these features differently. In the Jay Survey, almost half (46%) of the survey respondents said either the ease of playing the game or the speed of gameplay was a reason for buying an NBA 2K video game. However, only 16% of the survey respondents said that both of these features or attributes were a reason for buying an NBA 2K video game. Option B ("Competitiveness") is ambiguous and also combines the ability to play tournament-style competitions against other players with the ability to play with/against classic, historic, or national teams even though consumers value these features differently. In the Jay Survey, 39% of the survey respondents said either the inclusion of other teams besides current NBA teams or the ability to play tournament-style competitions against other players was a reason for buying an NBA 2K video game. However, only 11% of the survey respondents indicated that both of these features or attributes were a reason for buying an NBA 2K video game.

Option C ("Realism of the NBA Players") conflated the appearance of the NBA players with the movement of the NBA players. In the Jay Survey, 41% said *the appearance of the NBA players* or the movement of the NBA players was a reason for buying an NBA 2K video game. However, only 16% of the survey respondents said that both attributes were a reason for buying

See Gregory G. Holyk, Questionnaire Design, Encyclopedia of Survey Research Methods, 656, 657 (Sage, Ed. Lavrakas, 2008) ("Unclear concepts, poorly worded questions, and difficult or unclear response choices make the questionnaire difficult for... respondents...") and Kristen Olson, Double-Barreled Question, Encyclopedia of Survey Research Methods, 210 (Sage, Ed. Lavrakas, 2008) ("A double-barreled question asks about more than one construct in a single survey question. Best practices for questionnaire design discourage use of certain types of questions... Foremost among these recommendations is to avoid double-barreled questions.").

an NBA 2K video game. ²⁹ Options D and F ("Accuracy of the Game Setting" and "Customization Options," respectively) also were flawed; Option D was vague and both options combined features or attributes of an NBA 2K video game that were valued differently in the Jay Survey.

The answer choices for Qs. 1 and 2 were vague and combined differently valued features into single answer choices, and thus were improper.³⁰ When answer choices are vague or combine differently valued features, they result in unreliable answers and create analytical problems. It is unclear how respondents understood the answer choices for Qs. 1 and 2 or which attributes motivated them to select (or allocate points) to a particular answer choice. For example, some respondents may have selected an answer choice (such as Option A) if they valued any of the attributes listed (that is, either *ease of playing the game* or the *speed of gameplay*), whereas others may have selected this answer choice only if they valued all of the attributes listed (that is, both *ease of playing the game* and *speed of gameplay*).

Difficult Questions: The Bilgicer Survey also includes cognitively difficult questions. Q.2 in the Bilgicer Survey required survey respondents to allocate 100 points to as many as nine different features of the NBA 2K video games, and Q.4 required survey respondents to allocate 100 points to as many as six different attributes of the NBA players. This type of allocation (or ranking) posed a greater cognitive burden than having survey respondents identify their most important or their top two reasons for purchasing an NBA 2K video game. Further, Dr. Bilgicer anticipated that some survey respondents might have difficulty with the math required to answer

Option C also was leading in that it suggested to survey respondents that the realism of NBA 2K video games only related to the NBA players and not to other aspects of the game (such as, the quality of the graphics, the speed of gameplay, the arenas, or soundtrack).

³⁰ *Supra, note 28.*

Robert W. Oldendick, *Ranking, Encyclopedia of Survey Research Methods*, 688, 689 (Sage, Ed. Lavrakas, 2008) ("Because ranking requires making choices from among a series of options, this format is generally thought to be more difficult, (*i.e.*, to create a greater cognitive burden) for respondents than other response formats.").

Qs. 2 and 4 in his programmer instructions. Specifically, Dr. Bilgicer instructed the programmers to "Force the sum of points to be 100" for these questions.³² (Bilgicer Report, at Appendix C).

Dr. Bilgicer did not indicate in his report how many survey respondents' answers to Qs. 2 and 4 did not initially sum to 100. Nor did he summarize the responses to Qs. 2 and 4, *before* survey respondents' answers were forced to sum to 100. Therefore, it is not possible to evaluate the reliability of the answers to Qs. 2 and 4 or whether some points were allocated to *realistic tattoos* by the respondent merely to ensure the answers for Q.4 summed to 100.³³

Failure to Include a "Don't Know" Response Option: Dr. Bilgicer did not include a Don't know response option for Qs. 2 and 4 (the questions that asked respondents to allocate 100 points to different features of the NBA 2K games), even though, as discussed above, he anticipated that some respondents would have difficulty answering these questions.³⁴ To signal to respondents that it is appropriate not to have an opinion and reduce the demand for an answer, questions in

Apparently, the programmer forced the points to sum to 100 in Qs. 2 and 4 by not allowing the respondent to proceed to the next question until his/her answers added to 100 and by terminating the interview for those respondents who were unable to get their answers to add to 100. Dr. Bilgicer did not indicate how many interviews were terminated by the programmer or by the respondent at Q.2 or Q.4 in his survey. *See* Rough Dep. Tr. T. Bilgicer at 194:8–12.

Due to the difficulty of performing addition in a survey, most (91%) of Dr. Bilgicer's respondents assigned points to the features in Q.2 that were multiples of five or ten (such as, 5, 10, 15, 20, 25, 30, 35, 40, 45, or 50 points). In other words, very few respondents assigned between 1 and 4 points or between 6 and 9 points to a feature.

Dr. Bilgicer did not include a *Don't know* response option for Qs. 5-10 in his survey either. Thus, the majority of the questions in the Bilgicer Survey about the NBA 2K games (Qs. 2, 4, and 5-10) did not include a Don't know response option, and, therefore, encouraged guessing. The questionnaire for the Bilgicer Survey (at Appendix C, page 5) includes the following instruction before Q.1. "Our next questions are about the NBA 2K video game(s) that you bought. We would like to assure you that we are only interested in your opinions and beliefs. If you do not know the answer to a question or do not have an opinion or belief, please indicate this." Although Dr. Bilgicer apparently intended to include this instruction in his survey, the instruction does not appear in the Web screenshots that Dr. Bilgicer provided. Regardless, even if his respondents wanted to indicate Don't know, there was no option for them to do this for the majority of the questions about the NBA 2K games. In addition to failing to include a Don't know response option, Qs. 5 to 10 in the Bilgicer Survey suffer from other defects. For example, Q.9 (the question about when respondents typically buy NBA 2K games) does not include a None of the above response option even though respondents may not typically buy NBA 2K games at any particular point in time. Also, Q. 10 (the question that asks whether respondents typically buy NBA 2K games as a gift or for themselves) does not include a Both response option even though consumers may buy games as a gift and for themselves. Qs. 9 and 10 about consumers' typical purchases of NBA 2K games do not make sense for the 23% (94 respondents) in the Bilgicer Survey who indicated they had bought only one NBA 2K game. Also, the results for some of these questions are nonsensical. For example, while it is possible to toggle between players on a team during gameplay, it is only possible to "play with" one NBA player at a time in an NBA 2K game. Yet, over one-third (35%) of the Bilgicer respondents said they "always" play with more than one of the ten NBA players listed in Q.7.

copyright, trademark, and other intellectual property surveys typically include a *Don't know* response option for all questions.³⁵ Instead of including a *Don't know* response option in Qs. 2 and 4, Dr. Bilgicer forced respondents who did not have an opinion to randomly or arbitrarily allocate points to features (including "realism of the NBA players" and "tattoos") *because no other option* was available. Dr. Bilgicer's failure to include a *Don't know* response option for Qs. 2 and 4 (and for other questions about the NBA 2K games in his survey) required some respondents to guess and, thus, was improper.³⁶

Questions That Inflated the Value of NBA Players' Attributes: The Bilgicer Survey also asked questions that were designed to inflate the value of the NBA players' attributes, including the tattoos. Only five survey respondents assigned 100 points to *realism of the NBA players* in Q.2 and the average number of points assigned to realism for all survey respondents was approximately 12.57 points.³⁷ (Bilgicer Report, ¶ 69 and Appendix E). Yet, Dr. Bilgicer asked all of the survey respondents who assigned *any* points to the realism of the NBA players in Q.2, regardless of how many or how few, to allocate 100 points to the components of realism in Q.4 (realistic faces, realistic physiques, realistic haircuts, realistic tattoos, realistic game style or

Shari Diamond, *Reference Guide on Survey Research, Reference Manual on Scientific Evidence,* 3rd. 359, 390 (FJC, 2011) ("[T]he survey can use a quasi-filter question to reduce guessing by providing 'don't know' or 'no opinion' options as part of the question... By signaling to the respondent that it is appropriate not to have an opinion, the question reduces the demand for an answer and, as a result, the inclination to hazard a guess just to comply."); Allyson Holbrook, *Don't Knows (DKs), Encyclopedia of Survey Research Methods,* 208, 209 (Sage, Ed. Lavrakas, 2008) ("Respondents who do not have attitudes on an issue may respond to a question about the issue essentially by randomly selecting responses from among the choices offered. Including an explicit Don't Know response option would provide these respondents with a way to accurately report that they do not know how to answer a question.").

Scotts Co. v. United Indus. Corp., 315 F.3d 264, 280 (4th Cir. 2002) ("[T]he interviewers conducted the survey in this case in a way that effectively required the respondents to express a specific opinion, even if they did not have an opinion, by specifically not offering the respondents the opportunity to give 'not sure' as a response."); L&F Prods. v. Procter & Gamble Co., 845 F. Supp. 984, 998 (S.D.N.Y. 1994) ("The court is greatly troubled by the admission by plaintiff's witness that interviewees were not given the option of answering 'don't know/no opinion' to question 5..."); Procter & Gamble v. Hoffmann-LaRoche, Inc., 2006 WL 2588002, at *23 (S.D.N.Y. Sept. 6, 2006) ("[T]he survey should have provided respondents with all possible options to any question (including the options of 'neither' or 'don't know.'").

The five Bilgicer respondents who assigned 100 points to *realism of the NBA players* in Q.2, did not assign any points to *realistic tattoos* in Q.4. (Bilgicer Report, at Appendix E.)

tendencies, other).³⁸ Thus, almost all (98%) of the respondents who answered Q.4 were asked to allocate *more* points to the components of realism than they assigned to the overall value of realism in Q.2. For example, some survey respondents assigned only one point and others assigned only five points to the *realism of the NBA players* in Q.2. Yet, these respondents were asked to allocate 100 points to the components of realism in Q.4.³⁹ Dr. Bilgicer should have asked his respondents to allocate the points they *actually* assigned to *realism of the NBA players* in Q.2 (rather than 100 points) to the components of realism in Q.4.

The results reported in paragraph 64 and Table 2 of the Bilgicer Report are based on 220 respondents – a subset of the 401 respondents interviewed for the Bilgicer Survey. The average point allocation described in paragraph 64 and shown in Table 2 does not include the results for 181 respondents who did not assign any value to *realism of the NBA players* in Q.2 of the Bilgicer Survey. Also, the average point allocation is not adjusted to account for the fact that most of the 220 respondents who answered Q.4 were asked to allocate more points to the components of realism than they assigned to the overall value of realism in Q.2. For these reasons, the point allocation described in paragraph 64 and Table 2 of the Bilgicer Report is vastly inflated and extremely misleading.

A careful reading of the Bilgicer Report reveals that "realistic tattoos" do <u>not</u> account for 8.92 points or 8.92% of the *overall value of the NBA 2K video games* (as suggested in paragraph 64 and Table 2 of the Bilgicer Report). Rather, "realistic tattoos" account for at most 8.92% of the overall value of *realism* for the subset of survey respondents who said "realism of the NBA players" was a reason for buying an NBA 2K video game. Dr. Bilgicer admits that when calculated across all survey respondents, tattoos on *all of the NBA players* account for at most 0.99 points or

One respondent who indicated *realism of the NBA players* was a reason for his purchase in Q.1 (and who allocated points to *realism* in Q.2) was not asked Q.4 (because he selected the *Don't know* response option in Q.3).

Also, four of the 185 Bilgicer Survey respondents who did not assign any points to *realism of the NBA players* in Q.2 were asked to assign 100 points to the components of realism in Q.4. (Bilgicer Report, at Appendix E.)

less than 1% of the overall value of the NBA 2K video games (but he has not included this finding in any of the tables in his report).⁴⁰

Dr. Bilgicer Does Not Account for "Noise" in His Survey

Dr. Bilgicer excluded 48 survey respondents who selected the fictitious XTJ feature in Q.1 from his analyses even though they qualified for his survey and were purchasers of a relevant NBA 2K video game. (Bilgicer, Survey Terminates Breakdown.) This exclusion was improper. As previously discussed, a *control question* (a question about a fictitious feature or attribute) provides an indication of the extent to which survey respondents select other features or attributes merely because the survey asked about those features or attributes.⁴¹ Also, it is widely established that, when administering a survey that uses a *control question*, the percentage of survey respondents who selected the control or fictitious feature should be subtracted from the percentage who selected the other features or attributes in the survey.⁴²

Dr. Bilgicer does not report the percentage who selected the fictitious feature in Q.1 (Option G) or subtract this percentage from the percentage who selected the other answer choices for Q.1 (Options A-F and H-J). Rather than accounting for "noise," he erroneously assumes that none of the respondents who selected the other answer choices in Q.1 were guessing or vulnerable to demand effects. Also, Dr. Bilgicer did not include any other control questions or mechanism

In paragraph 18 of his report, Dr. Bilgicer states "By calculating the relative allocation of points to 'realistic tattoos' among all features of the NBA 2K games, I find that, on average, 'realistic tattoos' account for 0.99 points," and in paragraph 65 he states "[F]or the 401 respondents in my survey, I found that the relative importance of tattoos in the Accused Games is 0.99 points." However, Dr. Bilgicer does not explain in his report that 0.99 points represents less than 1% of the overall value of the NBA 2K video games. During his deposition, however, Dr. Bilgicer conceded the relative importance of all of the tattoos in the NBA 2K video games was 0.99 out of 100. Rough Dep. Tr. T. Bilgicer, 224:3–9 (Q: And you've concluded that the relative importance of all of the tattoos in the game to the 401 respondents in your survey is 0.99 out of 100, correct? A: So based on this methodology, and you know, using the entire sample size, correct, that's the conclusion I come to.)

⁴¹ *Supra, note 17.*

⁴² *Supra, note 18.*

⁴³ *Supra, note 13.*

that could be used to account for guessing, demand effects, and other sources of "noise" in the responses to the other questions in his survey (Qs. 2-10).⁴⁴

Dr. Bilgicer's failure to include a control mechanism or to account for "noise" in his survey reflects (a) a lack of familiarity with the many sources of "noise" in a survey and (b) a fundamental misunderstanding of how control groups and control questions are used to account for "noise" in a survey. As discussed, the use of a control question serves much the same purpose in surveying as the use of a placebo (or sugar pill) does in a clinical trial concerning a new drug. In a clinical trial, the percentage of patients who get well after taking a sugar pill is subtracted from the percentage who get well after taking the new drug. In other words, the control or sugar pill provides a measure of the extent to which patients who took the new drug would have recovered on their own. If a clinical trial does not include a control or the results of the control (or sugar pill) are ignored, the efficacy of the new drug will be inflated.

Similarly, in a survey, ignoring the results of a control question (or failure to include a control mechanism), is like ignoring the results for the sugar pill in a clinical trial – that is, it leads to inflated estimates. Thus, because Dr. Bilgicer did not account for "noise" in his survey, the value of *realistic NBA players* and *realistic tattoos* based on his survey is inflated.

Dr. Bilgicer did not provide the data for the 48 excluded respondents, and, therefore, it is not possible to determine how many of these respondents selected the other answer choices for Q.1 in his survey. Also, because the 48 excluded respondents were not asked any questions other than Q.1, it is not possible to determine the amount of "noise" associated with the other closed-ended questions in the Bilgicer Survey.

Dr. Bilgicer Mischaracterizes the Results of His Survey

Dr. Bilgicer intimates *realistic tattoos on the NBA players* were a significant motivator of purchases of the relevant NBA 2K video games. ⁴⁵ Yet, most of his respondents allocated no value or very little value to *realistic tattoos on the NBA players*. ⁴⁶ (See Table C.)

Table C Relative Value of Different Features/Attributes in the Bilgicer Survey			
	Average Point Allocation	Average % of Overall Value	
	(n = 401)	(n = 401)	
Likes basketball	18.87	19%	
Overall quality of the graphics	13.69	14%	
Gameplay features	12.84	13%	
Realism of the NBA players (NET)	12.57	13%	
Tattoos on all NBA players	(00.99)	(<1%)	
Other elements of realism (game style or tendencies, faces, physiques, haircuts, other)	(11.58)	(12%)	
Competitiveness	11.89	12%	
Customization options	9.82	10%	
Accuracy of the game setting	9.19	9%	
Price/Value of the game	9.18	9%	
Other	1.95	2%	
Total	100.00	101%	

^{*} Source: Bilgicer Report, at \P 65 and Table 1. Note, percentages add to 101 percent due to rounding.

As shown in Table C, the tattoos on <u>all</u> of the NBA players combined accounted for less than 1% of the overall value of the NBA 2K video games in the Bilgicer Survey. Even this low number is inflated because Dr. Bilgicer asked leading questions, and he did not account for guessing, demand effects or other sources of "noise" in his survey. And critically, this valuation

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Dr. Bilgicer at certain points conflates the *realism of the NBA players* with the value of *realistic tattoos on the NBA players*. Approximately 55% of his survey respondents said the realism of the NBA players was *a reason* for buying an NBA 2K video game in Q.1. However, only 23% (93 respondents) said *realistic tattoos on the NBA players* was a reason for buying an NBA 2K video game in response to Q.3. Conversely, 77% (308 respondents) indicated that *realistic tattoos on the NBA players* was <u>not</u> a reason for buying an NBA 2K video game.

^{77%} of the Bilgicer respondents assigned no value (0%) to tattoos and the other survey respondents allocated only about 4% of the value of the NBA 2K video games to the tattoos on all of the NBA players combined. (The 4% was calculated based on the data included in Appendix E of the Bilgicer Report and a spreadsheet containing the data from the Bilgicer Survey labeled "S3670025.")

accounts for all of the tattoos on all of the NBA players in the NBA 2K video games. The NBA 2K video games included hundreds of players, many of whom have a multitude of tattoos that were not inked by Mr. Hayden. Therefore, even a less than 1% estimation vastly overstates the value of the six tattoos in the NBA 2K video games.

The reason that the Bilgicer Survey results do not account for the value of the tattoos on the three NBA players at issue, Danny Green, Tristan Thompson, and LeBron James, is because Dr. Bilgicer never asked. Indeed, Dr. Bilgicer claimed that I should have asked the following question in my survey: "Was the realistic appearance of any particular NBA player(s) a reason why you bought an NBA 2K video game?" (Bilgicer Report, at ¶ 34). Yet, he did not include this question in his survey or ask any other questions about the value of realistic tattoos on particular NBA players (or on LeBron James, Danny Green, or Tristan Thompson). Contrary to Dr. Bilgicer's intimation, Q.7 ("How frequently, if at all, do you play with the following NBA players when you play an NBA 2K game?") and Q.8 ("How frequently, if at all, do you play with the following NBA teams when you play NBA 2K20 or NBA 2K21?") in his survey do not provide any information as to whether his survey respondents cared about the tattoos on the players or teams they play. Further, Qs. 7 and 8 included a small subset of the players and teams in the NBA 2K video games and did not include a *Don't know* response option and, thus, inflated the extent to which survey respondents said they played with the NBA players and the teams listed.

E. Conclusions

Dr. Bilgicer's criticisms of the Jay Survey are unwarranted. Based on my analysis of Dr. Bilgicer's survey, my professional experience, and my education, I am certain his survey does

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During his deposition, Dr. Bilgicer admitted that his report does not contain a specific calculation on the percentage of people who purchased the NBA 2K video game because of the specific tattoos on the players at issue. Rough Dep. Tr. T. Bilgicer, 96:4–11 (Q: Did you calculate anywhere in your report numerically what percentage of people purchased the game because of the specific tattoos on these players at issue in this case? A: In my report, I do not have a specific calculation regarding just this point.).

not provide a reliable or valid measure of the reasons for buying an NBA 2K video game or whether the tattoos on LeBron James, Danny Green, or Tristan Thompson were a reason why consumers bought an NBA 2K video game. The Jay Survey does provide a reliable and valid measure of these issues. A fair and impartial analysis of the data from the Jay Survey strongly supports the conclusions that (a) consumers bought the relevant NBA 2K video games for numerous reasons, principally that they like basketball, (b) no consumers bought the relevant NBA 2K video games for the tattoos on LeBron James, Danny Green, or Tristan Thompson, let alone the tattoos at issue in this case, and (c) there is no link between the sales of the NBA 2K video games and their depiction of the tattoos on LeBron James, Danny Green, or Tristan Thompson.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 13th day of August 2021 at Redwood City, California.

E. Deborah Jay, Ph.D.

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